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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,800	10/29/2001	Stephen Harold Sanders III	CM04263H	3213
22917	7590	05/07/2007		
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			EXAMINER JAMAL, ALEXANDER	
			ART UNIT 2614	PAPER NUMBER
			NOTIFICATION DATE 05/07/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	Application No. 10/052,800	Applicant(s) SANDERS ET AL.	
	Examiner Alexander Jamal	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8, 10, 11, 14-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                                  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____   |

## **DETAILED ACTION**

### ***Response to Appeal***

1. Based upon the submitted appeal brief arguments (12-30-2006), the examiner withdraws the previous set of rejections and submits a new, non-final set of rejections.
2. Based upon applicants specification (page 1 lines 15-30) and submitted arguments (appeal brief pages 6 and 7), examiner notes that the 'single wireless communication system' of applicant's claims is read to mean the final interface between user's terminal and the rest of the network. Applicant has argued that the separate autonomous network access interfaces of the previously cited prior art patent to Rabe et al. (6138010) are not 'service providers' but instead, together comprise multiple 'wireless communication systems'. As such, examiner reads the 'services' provided by 'service providers' as completely self contained signaling protocols (such as the email, or location services) that are embedded **within** the protocol of the wireless access point (single wireless communication system) to the end user. Examiner further notes that the 'services' are read in terms of the entire service, and not in terms of any signaling protocols within said service. For example 'providing a standard telephone service' could be considered one single service, while signaling actions performed within the telephone protocol (ringing, dialing, busy) would not be considered as multiple services.
3. Examiner notes a telephone call to applicant's attorney Valerie M. Davis (847) 576-6733 on 4-26-2007 to notify applicant that new prior art had been discovered and to ask if applicant would like the examiner to continue with appeal or issue a new set of non-final

rejections. Examiner spoke with Mrs. Davis's associate Sherry Booth (312) 655-8457 who notified examiner that Mrs. Davis would be out of town until midway through the next week. Since a response was due from the examiner and in light of the significant prior art found, examiner opted to issue a new set of non-final rejections.

Examiner notes MPEP 1204.01 [R-3]

If an appellant wishes to reinstate an appeal after prosecution is reopened, appellant must file a new notice of appeal in compliance with 37 CFR 41.31 and a complete new appeal brief in compliance with 37 CFR 41.37. Any previously paid appeal fees set forth in 37 CFR 41.20 for filing a notice of appeal, filing an appeal brief, and requesting an oral hearing (if applicable) will be applied to the new appeal on the same application as long as a final Board decision has not been made on the prior appeal. If, however, the appeal fees have increased since they were previously paid, then appellant must pay the difference between the current fee(s) and the amount previously paid. Appellant must file a complete new appeal brief in compliance with the format and content requirements of 37 CFR 41.37(c) within two months from the date of filing the new notice of appeal. See MPEP § 1205.<

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-3,5-8,10,11,14-16,19** rejected under 35 U.S.C. 102(e) as being anticipated by Sundqvist et al. (7054938).

As per **claim 1**, Sundqvist discloses a single wireless communication system which comprises the access point supplied by the network (which may be wireless (Col 5 lines 55-60), with said network further comprising the 'radio interface' over which various services are provisioned to the user (Col 6 lines 30-45). The communication system may comprise cellular base stations (Col 4 lines 4-20) that provide services to multiple communication terminals (Col 5 lines 55-60). The network may be a packet network (Col 2 lines 60-68). Sundqvist discloses network elements of a packet based network that sends and receives digital information (as per the standards listed in Col 4 lines 5-20). The network comprises components such as the radio bearer broker which is located within the wireless portion of the network such as at each base station (Col 6 lines 30-50, Col 7 lines 5-20), and also the service broker which is located in specific geographic locations to interface the various service providers with the particular communication system (radio access point) being used (Col 9 lines 15-31). The various network components communicate with each other in order to provision various services to the user via the single communication system (radio access point). There are various embodiments that disclose functioning network components that provision services to user terminals (endpoints as per Col 9 lines 5-15) via a service client such as shown in Figs. 6A,6B (Col 9 lines 30-65). Each of these devices inherently requires hardware for the purpose of receiving, processing, and sending network data (as per the known

standards noted above). Each of these units further inherently requires a 'microprocessor' for the purpose of controlling said hardware. Each microprocessor further requires software for the purpose of controlling the microprocessor. The hardware and supporting software comprise a 'service management agent'.

As per **claim 14**, it is rejected as per claim 1. The bandwidth broker of the single communication system may implement a bandwidth reservation system where multiple services may be provided to a terminal. The broker will examine the required resources (bandwidth) available to a terminal and also examine the priority of the services being requested (Col 2 lines 30-40). There may be more than one service provider (service broker) as shown in Figs. 6a and 6b. In order to determine the priority of a particular service request (a first service) relative to another, the bandwidth broker for a particular terminal service request must be aware of any other services that are being used by said terminal (such as a second service from a second service provider). The first service provider will be notified if the service may be provided (if the service is accepted the first service provider will be notified because a connection will be established) (Col 2 lines 30-45).

As per **claims 2,3,5**, since the network devices (those in the packet network or those in the base stations) are able to communicate with each other and the user terminal during the procedure of provisioning services, the 'service management agent' may be considered to be comprised of the software that enables each device to perform said communication, and as such, it is co-located among the network devices.

As per **claim 6**, there may be multiple user terminals in the network with a particular terminal being served by a particular 'radio bearer broker' (which is part of the 'service management agent') which may be located at each base station (Col 7 lines 5-20). Each radio bearer broker will be associated with the terminals at the particular base station to which it is located. Furthermore, the 'service broker' is also geographically located, and as such, will be associated with terminals in its particular geographic region. There may be multiple service management agents (implemented by multiple 'broker' devices) that are associated with individual user terminals (such as a first and second terminal, each using a separate base station in the same wireless network) (Col 9 lines 15-30).

As per **claims 7,8**, as per the claim 2 rejection, the software associated with the communication between the service brokers, radio bearer brokers, the radio access points, and the terminals may be considered a co-located service management agent. The software enabling the communication between one particular service broker or radio bearer broker to a particular bandwidth broker of a single communication network may be located at separate locations (such as when multiple service brokers, radio bearer brokers, or bandwidth brokers are being used).

As per **claims 10,15**, in the case where a terminal is allocated enough bandwidth for only 1 service at a time, the bandwidth broker will identify the presence or absence of the bandwidth using service when any additional service requests come in (Col 2 lines

15-30). If there is no other service present, then the terminal will have the available bandwidth and the requested service (first service) will be provided.

As per **claim 11**, as per the claim 14 and 10 rejections, if the requested service has priority (a service criteria) over an already enabled service, the lower priority service may be interrupted (Col 2 lines 30-45) for the higher priority one.

As per **claim 16**, the bandwidth broker determines the total bandwidth required by the terminal at the time of a service request and then decides if the service may be enabled (Col 2 lines 15-30).

As per **claim 19**, the services may be calls as implemented on the systems of Col 4 lines 5-20, or email (messages sent over the internet Col 2 lines 60-67).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 17,18,20** rejected under 35 U.S.C. 103(a) as being unpatentable over Sundqvist et al. (7054938) as applied to claims 1,14 above, and further in view of Deo et al. (6393481).



As per **claim 20**, Sundvquist discloses a wireless communications system with a service management agent as per the claim 1 rejection, but does not disclose the specific feature that the user terminal is contacted to request a first service, and after the service management agent detects a service already in use, it allows a reply from the communications device to determine that the first service may be implemented.

Dao discloses an intelligent network that manages services to customer terminals. The system implements a protocol where features (services) can be overridden, or enabled based on a set of criteria (Col 16 line 55 to Col 17 line 50). A controller may receive input from the user via a menu system (from the communications terminal) in order to specify criteria about currently running services and incoming service requests (Col 6 line 55 to Col 7 line 10). The billing portion of the service providers is contacted based on the user's input to select or interrupt services. Examiner notes that Sundvquist also discloses notifying the service providers as to the status of a communication terminal's use or non-use of a service as per the claim 1 and 14 rejections above. It would have been obvious to one of ordinary skill in the art at the time of this application to implement the feature of allowing the user to input criteria to the communication terminal for accepting (or interrupting) service and to provide the accompanying communication with the service providers for the purpose of providing improved functionality and an increased amount of user control in activating or deactivating services.

As per **claim 18**, Dao's system manages the communication between the service management agent (controlling the 'service control' function of Dao) and any service providers (Dao has the ability to interrupt service) based on user set criteria (including input from the communications terminal).

As per **claim 20**, it is rejected as per the claim 1,14 and 20 rejections. In any cases where the QOS managing of Sundqvist's system may only run 1 service or another, the system will have already detected a second service being provided (when it checks for the available bandwidth). The system will allow the user to select the appropriate service (wait until the second service stops functioning), disable any services running (second service) based on the user input, and then determine that the selected service can be provided (because the first service has been interrupted).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Jamal whose telephone number is 571-272-7498. The examiner can normally be reached on M-F 9AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A Kuntz can be reached on 571-272-7499. The fax phone numbers for the organization where this application or proceeding is assigned are **571-273-8300** for regular communications and **571-273-8300** for After Final communications.

Examiner Alexander Jamal  
April 30, 2007

A handwritten signature in black ink, appearing to read 'Alexander Jamal', written in a cursive style.